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FAO'S WORK ON CLIMATE CHANGE

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I. INTRODUCTION

1. The Commission, at its Eighteenth Session, requested FAO to increase capacity-building and training programmes on climate change adaptation and mitigation in collaboration with existing intergovernmental and international bodies.¹ It further stressed the importance of sufficient funding and capacity to support relevant research and development in the fields of genetic resources for food and agriculture (GRFA) and biodiversity for food and agriculture (BFA), especially in developing countries.²

2. The present document provides a breakdown of FAO's work, showing that much guidance is already available on climate change for both adaptation and mitigation.

II. FAO'S ACTIVITIES ON CLIMATE CHANGE

3. Climate change is a global challenge and the urgency to act is increasingly becoming more evident. FAO has always sought to enhance its support to Members in their efforts with respect to climate change adaptation and mitigation, working towards climate-resilient and low-emission agrifood systems while striving to achieve the Sustainable Development Goals (SDGs), in particular eradicating hunger and malnutrition. Climate change is embedded in FAO's Strategic Framework 2022-31³ and its Medium Term Plan 2022-25 and Programme of Work and Budget 2022-23,⁴ and specifically covered under Programme Priority Area BE1 (Climate change mitigating and adapted agri-food systems).

4. FAO is supporting countries to both mitigate and adapt to the effects of climate change through a wide range of research-based and practical programmes and projects,⁵ as an integral part of the 2030 Agenda and the SDGs. Under the Paris Agreement, countries are expected to reduce emissions and meet national climate targets. In addition, many courses in the e-learning academy have also been developed that highlight capacity development opportunities and to strengthen institutional and technical capacities (see Annex 2 for more details).

5. Building on the 2017 *FAO Strategy on Climate Change*⁶ and the recommendations of the *Evaluation of FAO's Support to Climate Action (SDG 13) and the Implementation of the FAO Strategy on Climate Change (2017)*,⁷ the new *FAO Strategy on Climate Change 2022–2031 (SCC)*⁸ was adopted by the FAO Council in June 2022. It is aligned with and contributes to the implementation of the *FAO Strategic Framework 2022-31*,⁹ reflecting FAO's vision of a world free from hunger and malnutrition where food and agriculture contribute to improving the living standards of all, especially the poorest, in an economically, socially and environmentally sustainable manner. The SCC aims at scaling up FAO's action to support Members in their efforts with respect to climate change adaptation and mitigation, if so required, at global, regional, country and local levels.

6. The SCC recognizes that climate change and biodiversity loss are interconnected challenges that should be addressed jointly, making various references to biodiversity, sustainable use and conservation. The vision for the SCC is that *Agrifood systems are sustainable, inclusive, resilient and adaptive to climate change and its impacts and contribute to low-emission economies while providing sufficient, safe and nutritious foods for healthy diets, as well as other agricultural products and services*,¹⁰ for present and future generations, leaving no one behind. The three pillars (and their six

¹ CGRFA-18/21/Report, paragraph 21.

² CGRFA-18/21/Report, paragraph 16.

³ C 2021/7.

⁴ C 2021/3.

⁵ <https://www.fao.org/climate-change/programmes-and-projects/en/>; <https://www.fao.org/gef/en>

⁶ FAO. 2017. *FAO Strategy on Climate Change*. Rome. <https://www.fao.org/3/i7175e/i7175e.pdf>

⁷ FAO. 2021. *Evaluation of FAO's Support to Climate Action (SDG 13) and the Implementation of the FAO Strategy on Climate Change (2017)*. Thematic Evaluation Series 03/2021. Rome.

<https://www.fao.org/3/cb3738en/cb3738en.pdf>

⁸ CL 170/4 Rev.1.

⁹ FAO. 2021. *Strategic Framework 2022-31*. Rome. <https://www.fao.org/3/cb7099en/cb7099en.pdf>

¹⁰ Agricultural products and services are from crop-based farming system and livestock systems, forestry, fisheries and aquaculture, including related ecosystems.

outcomes), constituting mutually reinforcing lines of action at global, regional and local levels, contain elements of intertwined climate-resilient, adaptive and low-emission development pathways:¹¹ An action plan to implement the SCC is under development.¹²

- **I Global and regional levels:** *Strengthening global and regional climate policy and governance*

Outcome 1: Agrifood systems embedded in international climate agenda

Outcome 2: FAO data and instruments trigger global climate action

- **II Country level:** *Developing countries' capacities for climate action*

Outcome 1: FAO Members implement and monitor climate commitments

Outcome 2: FAO Members mainstream climate actions in policies, programmes, practices and investments

- **III Local level:** *Scaling up climate action on the ground*

Outcome 1: Farmers adopt adaptive practices, mainly in risk areas

Outcome 2: Actors contribute to low-emission development pathways

7. A detailed report on FAO's work on climate change was considered at the Commission's Eighteenth Regular Session.¹³ Adding to the regional NDC analyses reported earlier, a recent FAO report 'Regional analysis of the Nationally Determined Contributions in the Near East and North Africa' illustrates that **agriculture is also a key part of the solution to addressing the climate crisis**, particularly in the Near East and North Africa region, one of the most water-scarce areas in the world. Below is a breakdown FAO's work.

Capacity development

8. FAO has produced various guidelines and tools that aim to support countries in their national adaptation of international climate change and biodiversity obligations, covering both climate change adaptation and mitigation. Annex 1 provides an overview of the guidance documents developed by FAO since 2015 to date. Annex 2 provides an overview of the most relevant e-learning courses and webinars developed by the FAO academy and partners.¹⁴

Projects

9. FAO's project portfolio on climate change has continuously expanded through both the Green Climate Fund (GCF) and the Global Environment Facility (GEF). The project portfolio for FAO's GCF includes USD 1 billion, 17 FAO-led projects¹⁵ and 66 readiness projects valued at USD 40.7 million, including USD 2.3 million for climate-resilient recovery strategies.¹⁶ FAO's global GEF portfolio currently exceeds USD 1 billion, assisting more than 120 countries in projects that respond to local priorities, deliver global environmental benefits, and advance the SDGs. GEF has 36 projects in 32 countries with USD 280 million address both, climate change and biodiversity. There are numerous other projects, but with little reference to biodiversity and/or GRFA. Annex 3 provides a list of projects. Some highlights of climate related programmes and projects are listed below.

¹¹ CL 170/4 Rev.1.

¹² COAG/2022/20 Rev.1, COFI/2022/7 and COFO/2022/5.1.

¹³ CGRFA-18/21/3/Inf.2

¹⁴ For further information consult the knowledge hub:

<https://www.fao.org/climate-change/knowledge-hub/en/>

¹⁵ Argentina, Armenia, Benin, Chile, Colombia, Congo, Côte d'Ivoire, Cuba, El Salvador, the Gambia, Guatemala, Jordan, Kyrgyzstan, Nepal, Pakistan, Paraguay and Sudan

¹⁶ <https://www.fao.org/gcf/en>

Programmes

Scaling up Climate Ambition on Land Use and Agriculture through NDCs and National Adaptation Plans

10. The Scaling up Climate Ambition on Land Use and Agriculture through nationally determined contributions and National Adaptation Plans (SCALA) programme¹⁷ responds to the urgent need for increased action to cope with climate change impacts in the agriculture and land use sectors. SCALA supports twelve countries in Africa, Asia and Latin America to build adaptive capacity and reduce greenhouse gas emissions in order to meet targets set out in their National Adaptation Plans (NAPs) and nationally determined contributions (NDCs), as well as contribute to the Sustainable Development Goals (SDGs).

11. SCALA countries are aiming to fulfill their adaptation and mitigation goals, in line with the NDC, NAP and national policies, by focusing on different value chain and/or landscape systems in the agriculture sector.

12. For example: 1) Senegal is working on agroecological practices, agroforestry, and improving crop varieties. 2) Cote d'Ivoire is working on sustainable agroforestry landscapes around cocoa culture. 3) Egypt is working on multiple agriculture subsectors (livestock, horticulture, crops, plant production and protection) with a focus on sugarcane value chain. 4) Costa Rica is working on coffee and livestock (beef) value chains and family farming. 5) Mongolia is working on improving pastureland management, maintaining appropriate livestock herd size, and developing a climate budget tagging system for the livestock and arable farming sector to track climate-related public expenditure.

Youth for Green and Climate-Resilient Agriculture Programme

13. The Youth for Green and Climate-Resilient Agriculture Programme (YCRA)¹⁸ was launched in January 2022 by FAO and IAAS (International Association of Students in Agricultural and Related Sciences), in collaboration with YPARD (Young Professionals for Agricultural Development) to support and promote youth-led projects. The initiative aims to contribute to capacity development, to give visibility to youth active in the agriculture sectors and to support the transfer of skills between generations.

¹⁷ For more information on all SCALA countries' priorities and work, please visit the programme website: <https://www.fao.org/in-action/scala/en>

¹⁸ <https://www.fao.org/climate-change/programmes-and-projects/detail/en/c/1504698/>

*ANNEX I***GUIDANCE DOCUMENTS DEVELOPED BY FAO ON CLIMATE CHANGE SINCE 2015 TO DATE**

Title	Description
FAO. 2015. <i>Voluntary Guidelines to Support the Integration of Genetic Diversity into National Climate Change Adaptation Planning</i> . Rome. https://www.fao.org/3/a-i4940e.pdf	They address the genetic resource dimension of adaptation planning. The guidelines follow the structure and approach of the technical guidelines for the National Adaptation Plan process prepared by the Least Developed Countries Expert Group (LEG) of the United Nations Framework Convention on Climate Change (UNFCCC). The process involves four main elements in each of which a number of steps are proposed. They aim to assist countries in managing genetic resources as a vital reservoir and tool to adapt agriculture and build resilience into agricultural and food production systems.
FAO. 2015. <i>Climate change and food security: risks and responses</i> . Rome. https://www.fao.org/documents/card/en/c/82129a98-8338-45e5-a2cd-8eda4184550f/	This report serves to: raise awareness that climate change is already impacting the food security and nutrition of the most vulnerable, and that if action is not very quickly taken, climate change will increasingly threaten the achievement of the goal to eradicate hunger; describe precisely the pathways by which climate change finally impacts the food security of people, and to show the range of actions needed; and also aims to fuel the ongoing discussions on how to operationalize adaptation to climate change, and to show that food security and nutrition, as well as the agriculture sectors that support it, should be a priority area of intervention. Furthermore, it brings together evidence from the IPCC, updated by the latest scientific findings and enriched by FAO's knowledge and experiences on the ground providing an overview of the cascading impacts of climate change on food security and nutrition, from physical impacts on agro-ecosystems to livelihoods and food security.
Karttunen, K., Wolf, J., Garcia, C. & Meybeck, A. 2017. <i>Addressing agriculture, forestry and fisheries in National Adaptation Plans – Supplementary guidelines</i> . Rome. FAO. https://www.fao.org/3/i6714e/i6714e.pdf	This publication responds to a call issued in 2013 by the LEG of the UNFCCC, inviting international actors to “come forward in drafting supplementary sectorial guidelines to the NAP Technical Guidelines”. They provide specific guidance for national adaptation planning in the agricultural sectors and contain a ‘checklist’ of approaches, actions, tools and activities that countries may find useful in undertaking adaptation planning
FAO. 2017. <i>Livestock solutions for climate change</i> . Rome https://www.fao.org/3/I8098EN/i8098en.pdf	This brochure was produced for the UNFCCC COP23 in Bonn and presented by FAO Director General during a high-level meeting. It summarizes the 3 technical strategies for mitigating climate change in the livestock sector: increasing efficiency, improving carbon stocks in pastures and recycling animal waste and

	crop residues as feed. This brochure was translated in Spanish. It is being used by FAO and partners as a reference for project design or for framing information document on the role of livestock in climate change solutions.
FAO. 2018. <i>Climate change for forest policy-makers – An approach for integrating climate change into national forest policy in support of sustainable forest management – Version 2.0</i> . FAO Forestry Paper no.181. Rome. https://www.fao.org/3/CA2309EN/ca2309en.pdf	This publication seeks to provide a practical approach to the process of integrating climate change into national forest programmes. The aim is to assist senior officials in government administrations and the representatives of other stakeholders, including civil society organizations and the private sector, prepare the forest sector for the challenges and opportunities posed by climate change. This document complements a set of guidelines prepared by FAO in 2013 to support forest managers incorporate climate change considerations into forest management plans and practices. ¹⁹
Barange, M., Bahri, T., Beveridge, M.C.M., Cochrane, K.L., Funge-Smith, S. & Poulain, F., eds. 2018. <i>Impacts of climate change on fisheries and aquaculture: synthesis of current knowledge, adaptation and mitigation options</i> . FAO Fisheries and Aquaculture Technical Paper No. 627. Rome, FAO. 628 pp. https://www.fao.org/3/I9705EN/i9705en.pdf	This report provides the most up-to-date information on the disaggregated impacts of climate change for marine and inland fisheries, and aquaculture, in the context of poverty alleviation and the differential dependency of countries on fish and fishery resources. The work is based on model projections, data analyses, as well as national, regional and basin-scale expert assessments. The results indicate that climate change will lead to significant changes in the availability and trade of fish products, with potentially important geopolitical and economic consequences, especially for those countries most dependent on the sector.
FAO. 2018. <i>Climate-Smart Agriculture Sourcebook. Second Edition</i> . Rome. https://www.fao.org/climate-smart-agriculture-sourcebook/en/	The new edition includes new findings, case studies and lessons learned. It also takes into account the changes in the landscape of international climate action since the original edition was published in 2013. The 2030 Agenda for Sustainable Development – which encompasses the Paris Agreement on Climate Change, the SDGs and the Addis Ababa Action Agenda – provides an international framework for strong national actions and collective efforts to achieve sustainable development. Climate-smart agriculture, as an approach to achieve sustainable food and agriculture, has a vital role to play.
FAO. 2019. <i>Climate-smart agriculture and the Sustainable Development Goals: Mapping interlinkages, synergies and trade-offs and guidelines for integrated implementation</i> . Rome https://www.fao.org/3/ca6043en/CA6043EN.pdf	Presents an assessment and mapping of CSA-SDG interlinkages. These provide entry points for targeted CSA planning to enhance synergies and reduce potential trade-offs between CSA objectives and the SDGs. The publication also provides guidelines for the integration of the CSA implementation steps into the 2030 Agenda.

¹⁹ FAO. 2011. *Climate Change for Forest Policy-Makers An approach for integrating climate change into national forest programmes in support of sustainable forest management Version 1.0*, Rome. <https://www.fao.org/3/i2429e/i2429e00.pdf>

<p>FAO. 2019. <i>Operational guidelines for the design, implementation and harmonization of monitoring and evaluation systems for climate-smart agriculture</i>. Rome. https://www.fao.org/3/ca6077en/CA6077EN.pdf</p>	<p>Aim to address the core constraints and needs of FAO Member Nations on both the design and implementation of monitoring and evaluation systems that can simultaneously address CSA and sector reporting requirements for the 2030 Agenda, the Sendai Disaster Risk Reduction Framework and the UNFCCC Paris Agreement.</p>
<p>FAO. 2019. <i>Five practical actions towards low-carbon livestock</i>. Rome. https://www.fao.org/3/ca7089en/ca7089en.pdf</p>	<p>Describes how five practical actions: 1) boosting efficiency of livestock production and resource use; 2) intensifying recycling efforts and minimizing losses for a circular bioeconomy; 3) capitalizing on nature-based solutions to ramp up carbon offsets; 4) striving for healthy, sustainable diets and accounting for protein alternatives; and 5) developing policy measures to drive change, can be implemented in integrative and sustainable ways, taking account the diversity of livestock systems and enhancing synergies and managing tradeoffs with other sustainable development objectives. It highlights how FAO can help by providing developing tools, methodologies and protocols for measuring emissions, and supporting the development and analysis of technical and policy options towards sustainable, low-carbon livestock.</p>
<p>Meybeck, A., Rose, S. and Gitz, V. 2019. <i>Climate change vulnerability assessment of forests and forest-dependent people – A framework methodology</i>. FAO Forestry Paper No. 183. Rome, FAO. https://doi.org/10.4060/ca7064en</p>	<p>This publication provides practical technical guidance for forest vulnerability assessment in the context of climate change. It describes the elements that should be considered for different time horizons and outlines a structured approach for conducting these assessments. The framework will guide practitioners in conducting a step-by-step analysis and will facilitate the choice and use of appropriate tools and methods. Background information is provided separately in text boxes, to assist readers with differing amounts of experience in forestry, climate change and assessment practices. The publication will provide useful support to any vulnerability assessment with a forest- and tree-related component.</p>
<p>Crumpler, K. and Meybeck, A. 2020. <i>Adaptation in the agriculture sectors: leveraging co-benefits for mitigation and sustainable development</i>. Rome, FAO. https://www.fao.org/publications/card/fr/c/CA9195EN/</p>	<p>This policy brief takes climate change adaptation in agriculture (crops, livestock, forestry, fisheries and aquaculture) as its starting point to identify potential co-benefits. It assesses the broad and multi-directional interplay between climate action and sustainable development. It identifies the various pathways by which economic, social and environmental co-benefits can be generated from adaptation interventions in agriculture (covering crops, livestock, forestry, fisheries and aquaculture), across sectors and at different scales.</p>
<p>Meybeck, A., Gitz, V., Wolf, J. & Wong, T. 2020. <i>Addressing forestry and agroforestry in National Adaptation Plans – Supplementary guidelines</i>. Bogor/Rome. FAO and FTA. https://doi.org/10.4060/cb1203en</p>	<p>The NAP–Ag Guidelines was complemented by the publications, in 2020, on <i>Addressing forestry and agroforestry National Adaptation Plans – supplementary guidelines</i>, that provides specific guidance for national adaptation planning in the forestry sector and on <i>Addressing fisheries and aquaculture in National Adaptation Plans – supplementary guidelines</i>, that highlight the nexus between sustainable aquatic food production and climate adaptation.</p>

<p>Brugere, C. & De Young, C. 2020. <i>Addressing fisheries and aquaculture in National Adaptation Plans</i>. Supplement to the UNFCCC NAP Technical Guidelines. Rome, FAO. https://www.fao.org/3/ca2215en/CA2215EN.pdf</p>	
<p>Buto, O., Galbiati, G.M., Alekseeva, N., Bernoux, M. 2021. <i>Climate finance in the agriculture and land use sector - global and regional trends between 2000 and 2018</i>. Rome, FAO. https://doi.org/10.4060/cb6056en</p> <p>Buto, O., Galbiati, G.M., Alekseeva, N., Bernoux, M. 2021. <i>Climate finance in the agriculture and land use sector – global and regional trends between 2000-2019</i>. FAO. Rome. https://www.fao.org/3/cb8040en/cb8040en.pdf</p>	<p>This report aims to increase the understanding of the climate finance trends in the agriculture and land-use sector at the global and regional scales, providing insights for UN agencies, international finance institutions, national governments of both donor and recipient countries, and governmental and non-governmental stakeholders. By looking at the main features of climate finance, including the source and geographical destination of resources, climate objectives, and gender sensitivity, the analysis establishes the key trends in the agriculture and land-use sector in the period 2000- 2018. In addition, it identifies gaps that may affect the stagnated trend relative to other sectors. This study focuses on the quantitative analysis of data available in the climate-related development finance database of the Organization for Economic Co-operation and Development’s (OECD) Development Assistance Committee (DAC).</p> <p>A special update was also released to include the data for 2019.</p>
<p>FAO. 2021. <i>Climate-smart agriculture case studies 2021 – Projects from around the world</i>. Rome. http://www.fao.org/3/cb5359en/cb5359en.pdf</p>	<p>This publication describes climate-smart agriculture (CSA) case studies from around the world, showing how the approach is implemented to address challenges related to climate change and agriculture.</p>
<p>GIZ, IFAD, FAO, UNDP, Ministry of Economy of the Kyrgyz Republic. 2021. <i>Analysis of livestock and pasture sub-sectors for the NDC revision in Kyrgyzstan</i>. https://www.fao.org/3/cb7629en/cb7629en.pdf</p>	<p>This publication presents an in-depth assessment of livestock and pasture sub-sectors for their potential to raise the ambition to reduce emissions by the Kyrgyz Republic under the Paris Agreement. This assessment includes the climate co-benefits of large livestock projects in the country projects, using the tool Global Livestock Environmental Assessment Model interactive (GLEAM-i), an on-line Tier-2 GHG calculator. It was produced in support of the 2021 NDC revision in Kyrgyzstan.</p>
<p>FAO, IFAD and GIZ. 2021. <i>Low carbon and resilient livestock development in Kyrgyzstan – Policy brief</i>. Rome, IFAD and FAO. https://www.fao.org/documents/card/en/c/cb7436en/</p>	<p>This brief was produced by the International Fund for Agricultural Development (IFAD) in collaboration with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the Food and Agricultural Organization of the United Nations (FAO). It summarizes the contributions of FAO and IFAD to the GIZ-led publication “Analysis of livestock and pasture sub-sectors for the NDC revision in Kyrgyzstan”.</p>
<p>IFAD and FAO (2021). <i>Low carbon livestock development in Kyrgyzstan. Quantifying the future</i></p>	<p>This report presents the potential impact of the planned IFAD-funded Regional Resilient Pastoral Communities Project (RRPCP) on greenhouse gas (GHG) emissions, both in terms of the overall impact of</p>

<p><i>impact of the Regional Resilient Pastoral Communities Project on greenhouse gas emissions</i>. Rome. https://www.fao.org/3/cb7221en/cb7221en.pdf</p>	<p>the project, and as a possible input to the update of Kyrgyzstan’s Nationally Determined Contributions (NDC). Previous NDCs have not formulated commitments to reduce emissions from the livestock sector, despite 85% of the agricultural area being used as pastures for grazing and 62% of the agricultural emissions coming from the livestock sector (Government of Kyrgyzstan 2016). The assessment was carried out using the Global Livestock Environmental Assessment Model-interactive (GLEAM-i), a tool developed by FAO to measure emissions from livestock value chains and compare the impact of future scenarios.</p>
<p>FAO, UNDP 2021. Using climate services in adaptation planning for the agriculture sectors https://www.fao.org/in-action/naps/resources/detail/en/c/1368069/</p>	<p>This brief provides an overview of climate services (CS) and how they can be used to assess risk and optimise adaptation decision-making in the agriculture sectors.1 It highlights entry points to integrate CS across all elements of adaptation planning, while acknowledging the challenges and limitations of using CS, particularly in Least Developed Countries (LDCs). The brief also discusses key considerations in using climate services for planning and provides technical guidance on dealing with the uncertainty and confidence of climate projections.</p>
<p>Van Wassenauer, L., van Hilten, M., van Ingen, E., van Asseldonk, M., 2021. Applying blockchain for climate action in agriculture: state of play and outlook. Rome/Wageningen, FAO and WUR. https://doi.org/10.4060/cb3495en</p>	<p>The objective of this study is to provide insights into potentialities, steps, and best practices in applying blockchain technology (BCT) to use cases in agriculture in the context of climate change, to explore the opportunities and challenges in applying the BCT in agricultural sectors with the aims of reducing greenhouse gas emission, increasing carbon sequestration, as well as supporting farmers’ adaptation to climate change. Furthermore, this study also aims to shed light on policy options and propose policy guidance adapted to developing countries on blockchain applications. It contains references to biodiversity.</p>
<p>FAO. 2022. <i>Improving the methodology for the national greenhouse gas (GHG) inventory and GHG inventory system in Madagascar</i>. https://www.fao.org/documents/card/en/c/cb9368en</p>	<p>The case study highlights how a roadmap of actions and their targeted implementation can assist Madagascar in coping with the main challenges of addressing the UNFCCC reporting requirements. It describes the starting point for the roadmap of actions and explains how the approach chosen, the tools used, and sustained effort made it possible to overcome the country’s challenges. It also highlights the importance of developing sustainable in-house capacity for continuous future improvement.</p>
<p>FAO. 2022. <i>Managing risks to build climate-smart and resilient agrifood value chains. The role of climate services</i>. Rome. https://doi.org/10.4060/cb8297en</p>	<p>This report provides significant primary information and recommendations on the development of climate services across the agrifood value chain with a view to systematically enhance sustainable and resilient opportunities. It also provides a basis for further research and investment funding in this area. Its findings could spark follow-up research and public and private investment.</p>
<p>Özkan, Ş., Teillard, F., Lindsay, B., Montgomery, H., Rota, A., Gerber P., Dhingra M. and Mottet, A. 2022. <i>The role of animal health in national climate</i></p>	<p>This brief produced by FAO in collaboration with the Global Dairy Platform (GDP) and the Global Research Alliance on Agricultural Greenhouse Gases (GRA) and with the financial support of the New Zealand Government. It provides guidance to policy makers and livestock sector actors on the quantification of animal health interventions and their impact on greenhouse gas (GHG) emissions, and</p>

<p><i>commitments</i>. Rome, FAO. https://www.fao.org/3/cc0431en/cc0431en.pdf</p>	<p>how to include this in national climate commitments, such as GHG inventories and NDCs. It provides examples in specific countries in collaboration with the World Bank and the International Fund for Agricultural Development (IFAD).</p>
<p>FAO. 2022. <i>Cameroon moves towards low-carbon livestock systems</i>. Policy brief. Rome. [PWS Record ID: 294930. pdf in last stage of OCC quality control, url available in a couple of days]</p>	<p>This policy brief was prepared collaboratively by the Food and Agriculture Organization of the United Nations (FAO), the Agricultural Research Institute for Development (IRAD) in Cameroon, the Ministry of Environment, Protection of Nature and Sustainable Development (MINEPDED) in Cameroon, the Livestock Development Project of the Ministry of Livestock, Fisheries and Animal Industries (PRODEL-MINEPIA) in Cameroon and the World Bank. It presents the potential for large scale livestock development projects to contribute to national climate commitments.</p>
<p>FAO. 2022. <i>Grazing with trees – A silvopastoral approach to managing and restoring drylands</i>. FAO Forestry Paper, No. 187. Rome https://doi.org/10.4060/cc2280en</p>	<p>The report confirms the importance of agroforestry as a primary pathway for forest restoration in dryland areas as recommended by FAO’s State of Forests 2022, and its recommendations encourage landscape planners and decision makers to consider livestock as allies, carefully restore tree cover and accelerate action to promote healthy ecosystems.</p>

ANNEX 2

E-LEARNING COURSES AND WEBINARS ON CLIMATE CHANGE

E-LEARNING COURSES	
Koronivia Joint Work on Agriculture webinar series : https://www.fao.org/climate-change/our-work/what-we-do/koronivia/kjwa-webinars/en/	
Assessing uncertainties in the national greenhouse gas inventory: a focus on land use (https://elearning.fao.org/course/view.php?id=788)	Under the Enhanced Transparency Framework (ETF) there is a mandatory requirement for all countries party to the Paris Agreement to estimate and report on uncertainty in their National Greenhouse Gas inventories. This course has been developed by FAO to strengthen institutional and technical capacity in national entities to allow them to meet this requirement and produce reliable data.
Toolkit - National Adaptation Plans: Building Climate Resilience in Agriculture https://www.fao.org/in-action/naps/resources/learning/en/	All material of the Massive Open Online Course on National Adaptation Plans: Building Climate Resilience in Agriculture is now available through a comprehensive online toolkit. Materials presented here were originally shared via the One UN Climate Change Learning Partnership (UN CC:Learn) Platform during a six-week MOOC. The course is still available for self-paced learning on UN CC:Learn and can be found here. The NAP-MOOC learning materials are presented as part of the Integrating Agriculture in National Adaptation Plans (NAP-Ag) Programme and is a joint effort between the United Nations Development Programme (UNDP), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Institute for Training and Research (UNITAR), and more than 40 leading experts on climate change, finance, agriculture, communications and more.
Preparing a greenhouse gas inventory under the enhanced transparency framework (https://elearning.fao.org/course/view.php?id=618)	Sustainable and reliable national greenhouse gas inventories are essential instruments for assessing efforts to address climate change and progress made towards the goals of the Paris Agreement. They also are crucial for assessing the effectiveness of mitigation policies and measures; and making long-term emission projections. This course introduces basic concepts on Measurement, Reporting and Verification (MRV), United Nations Framework Convention on Climate Change (UNFCCC) reporting requirements and the Enhanced Transparency Framework (ETF). It provides an overview of how to set up a national greenhouse gas inventory (NGHGI), looking at its cycle, main elements and principles, and the implications of the ETF.

<p>Climate-smart forestry (https://elearning.fao.org/course/view.php?id=578)</p>	<p>This course explores the role of forests and trees in climate-smart agriculture (CSA). It takes into consideration the ecosystem services and goods that forests provide, and the importance of forests for the food security of forest-dependent people. It explores the complex relationship between climate change and forests, and how adaptation and mitigation measures can benefit forests, forest-dependent people, and global climate change. The synergies and trade-offs involved in climate-smart forest management are also considered.</p>
<p>Climate change adaptation and mitigation in fisheries and aquaculture (https://elearning.fao.org/course/view.php?id=544)</p>	<p>This course provides an overview of adaptation and mitigation strategies that can be implemented in response to climate change impacts on the fisheries and aquaculture sector.</p>
<p>Climate-smart fisheries and aquaculture (https://elearning.fao.org/course/view.php?id=579)</p>	<p>This course has been designed to support the inclusion of climate-smart agriculture (CSA) approaches in the fisheries and aquaculture sector. It provides technical knowledge on these concepts and examines how implementation of CSA practices can enhance mitigation and adaptation to climate change in the sector.</p>
<p>Climate-smart livestock (https://elearning.fao.org/course/view.php?id=437)</p>	<p>This course has been designed to support the inclusion of climate-smart agriculture (CSA) approaches in the livestock sector. It provides technical knowledge on these concepts and examines how implementation of CSA practices can enhance mitigation and adaptation to climate change in the sector.</p>
<p>NAP-Ag programme knowledge tank https://www.fao.org/in-action/naps/knowledge-tank/</p>	<p>This NAP-Ag Knowledge Tank targets national planners, development actors and decision-makers. It contains tools, methods, case studies and other knowledge materials on climate change adaptation in the agriculture sectors (crops, livestock, forestry, fisheries and aquaculture).</p>
<p>Livestock adaptation under climate change (<i>currently under development</i>)</p>	<p>The course seeks to provide the learners with an understanding of the concept of climate-related risks, key global climate trends and potential impacts on the land-based livestock supply-chain, strategies to facilitate livestock adaptation, as well as tools and models to monitor and assess adaptation – in alignment with the United Nations Agenda 2030 on Sustainable Development Goals. The geographical extent of this course is global, with selected case-studies from Latin America, Africa and Asia.</p>
<p>On-line course on the use of GLEAM-i, the Global Livestock Environmental Assessment Model-interactive. GLEAM-i part 1 Introduction GLEAM-i part 2 Technical features GLEAM-i part 3 and 4 Practice exercises</p>	<p>This course aims to present the the Global Livestock Environmental Assessment Model-interactive (GLEAM-i, https://gleami.apps.fao.org/), an online GHG calculator specific to the livestock sector and using IPCC Tier 2 methodology. The course is presented in the form of 3 videos, including an introduction to the tool, a presentation of its technical features and guided practice exercises.</p>

WEBINARS	
<p>Webinar series: Addressing transparency in agriculture and land use sectors (https://www.fao.org/climate-change/our-work/what-we-do/transparency/webinars/en/)</p>	<p>This webinar series explores various aspects of the Enhanced Transparency Framework (ETF) with a specific focus on the agriculture and land use sectors. It covers the most critical topics in implementing the ETF through its modalities, procedures and guidelines (MPGs). It also looks at tools and guidance materials that can help countries enhance their capacity and address the ETF requirements.</p>
<p>Webinar series: Empowering youth in agriculture to engage in UNFCCC and COP processes (https://www.fao.org/climate-change/knowledge-hub/youth/youth-webinar/en/)</p>	<p>This webinar series aims to clarify decision-making processes around climate change and agriculture for young people. Ultimately, it aims to empower youth and build their capacity to influence decision-making related to the UNFCCC and COP.</p> <p>This webinar series is organized by the FAO Climate Change Knowledge Hub and the Children and Youth constituency of the United Nations Framework Convention on Climate Change (YOUNGO) in collaboration with the World Food Forum.</p>
<p>Webinar series: Irrigation in climate-smart agriculture (https://www.youtube.com/playlist?list=PLzp5NgJ2-dK5njuu3VXQm7YLAhnDBNWOY)</p>	<p>These webinars are to strengthen participants' knowledge of irrigation in the context of climate-smart agriculture and practical options for implementing it and to support the exchange of experiences between members of the online Community of practice for agriculture sectors and climate change.</p>
<p>Enabling advisory services for climate-smart agriculture (https://www.youtube.com/playlist?list=PLzp5NgJ2-dK7DjCtoiSFM2SacmUWBCTpl)</p>	<p>Interactive event where participants and presenters will exchange knowledge on how to build an enabling environment for Rural Advisory Services (RAS) in order to support producers in implementing climate-smart agriculture.</p> <p>The webinar is open to all. It can be especially relevant for: colleagues involved in planning and budgeting for RAS; people working on formulation of NAPs, NAMAs and climate finance who want to better understand the role of RAS; extension officers, and development practitioners working on climate change.</p>
<p>Index-based insurance for risk management in climate-smart agriculture (https://www.youtube.com/playlist?list=PLzp5NgJ2-dK5o1Ha7TQSdM0mZZYdrYIHI)</p>	<p>Interactive event where participants and presenters will exchange knowledge on index-based insurance as a tool for climate risk management and transfer in agriculture sectors, and what is needed to increase the uptake of index-based insurance especially among the most vulnerable producers.</p> <p>The webinar open to all. It can be especially relevant for: colleagues in developing countries vulnerable to climate change; those involved in climate-risk management, including insurance (public and private sectors, producer organizations and civil society); people working on formulation of climate change and agriculture</p>

	policies and climate finance who want to better understand the role of index-based insurance; farmer organizations, private sector and policy makers, and development practitioners working on climate change.
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ANNEX 3**PROJECTS**

ANIMAL	
GCP /GLO/247/IFA: Low carbon and resilient livestock development strategies for climate informed investments	To provide technical support to the IFAD on (1) building the capacity for the assessment of GHG emissions from livestock investments and on (2) assessing the climate co-benefits of investments in 5 countries, through tools, data and evidence-based decision-making.
UTF /CMR/046/CMR: Accompagnement du prodel pour mesurer les co-benefices en matière de changement climatique	To provide technical support and capacity building to the World Project PRODEL on livestock development on the topic of low carbon and resilient livestock, including for using the GLEAM-i tool for GHG assessments
GCP /GLO/362/WBK: Technical assistance to World Bank for low carbon and resilient livestock development	To provide technical support to the World Bank on (1) building the capacity for the assessment of GHG emissions from livestock investments and on (2) assessing the climate co-benefits of investments in 7 countries, through tools, data and evidence-based decision-making.
PLANT	
GCP /PER/045/GFF: Sustainable management of agro-biodiversity and vulnerable ecosystems recuperation in Peruvian Andean regions through Globally Important Agricultural Heritage Systems (GIAHS) approach	The objective of the project is to conserve in-situ and to sustainably use globally-important agro-biodiversity (ABD) through the preservation of traditional agricultural systems, the integrated management of forests, water, and land resources, and the maintenance of ecosystem services
GCP /CUB/017/GFF: Introduction of new farming methods for the conservation and sustainable use of biodiversity, including plant and animal genetic	The aim of the project is to introduce new farming methods for the conservation and sustainable use of biodiversity, including plant and animal genetic resources, in production landscapes in selected areas of Cuba. The project further aims to contribute to <i>in situ</i> conservation, including on farms, of a group of species,

resources, in production landscapes in selected areas of Cuba (FSP)	landraces and varieties of global and national importance for food, as well as their wild relatives and the ecosystems that harbour them.
GCP /ECU/105P/GFF: Conservación y uso sostenible de parientes silvestres de cultivos (PSC) y especies silvestres comestibles (ESC), bajo un marco institucional y desarrollo de iniciativas comunitarias rurales en Ecuador. (PPG)	Strengthen institutional systems for the implementation and compliance with measures for the registration, conservation and sustainable use of crop wild relatives and edible wild species in Ecuador, as a complementary environment for the incorporation of crop wild relatives and edible wild species in local, national plans and strategies and global measures for conservation. of agrobiodiversity and its contribution to improving the quality of life of rural populations.
GCP /MEX/305/GFF: Securing the Future of Global Agriculture in the face of climate change by conserving the Genetic Diversity of the Traditional Agroecosystems of Mexico (FSP)	To develop policies and mechanisms that support agro-biodiversity conservation, sustainable use and resilience, by promoting the knowledge of traditional agro-ecosystems and the cultural methods that maintain that agroBD in Mexico
GCP /TAJ/021/GFF: Facilitating agrobiodiversity (ABD) conservation and sustainable use to promote food and nutritional resilience in Tajikistan (MSP)	Conservation, sustainable use and securing of the national and globally significant agrobiodiversity and the associated knowledge and cultural aspects of traditional agro-ecosystems of Tajikistan.
GCP /GLO/980/GFF: Global coordination project for the Dryland Sustainable Landscapes Impact Program	Project Objective: To maximize the effectiveness, efficiency and sustainability of GEF-7 investments in sustainable drylands management to achieve Land Degradation Neutrality
GCP /MAU/001/GFF: Integrated ecosystem management program for the sustainable human development in Mauritania (FSP)	Integrated ecosystem management program for the sustainable human development in Mauritania (FSP)
GCP /INS/804/GFF: Crop Diversity Conservation for Sustainable Use in Indonesia (PPG)	To strengthen the conservation and sustainable use of globally significant Indonesia's crop diversity, in the wild and on-farm, through sustainable practices and improved capacities, as well as strengthened enabling environment, and the development of long-term incentive mechanisms
GCP /CPR/061/GFF: On-farm Conservation and Sustainable Use of Genetic Diversity of Crops originated in China (FSP)	Conserving and Protecting Genetic Diversity for Food Security in China
GCP /IND/183/GFF: Green-Agriculture: Transforming Indian agriculture for global	The Full Size Project - Green-Agriculture: Transforming Indian agriculture for global environmental benefits and the conservation of critical biodiversity and forest landscapes, aims to catalyze transformative change for India's agricultural sector to support achievement of national and global environmental benefits and conserve critical biodiversity and forest landscapes. The project's overall objective will be realized through the

environmental benefits and the conservation of critical biodiversity and forest landscapes (FSP)	implementation of two components. The first component will set in place the tools required to strengthen the country's enabling environment to enhance the capacity of the agricultural sector to deliver BD, SLM, SFM, and CCM benefits. The first component will help coordinate national, state and local approaches, including facilitating the adoption of appropriate fiscal and market incentives to promote or conserve diversity on-farm and across productive landscapes. The project will assist GoI in prioritizing efforts through the identification of high conservation-value areas where practices associated with unsustainable agricultural practices threaten ecological integrity. Strategically directing attention towards priority landscapes will help increase efficiency, innovation, and impact. The second component will demonstrate on-the-ground conservation improvements designed to drive higher-level changes. Under the second component, the project will work in high conservation priority landscapes to demonstrate replicable "best practices". Interventions will be designed to show how ecosystem-based agricultural improvements can deliver social, production, and ecological benefits. The project will provide an evidential basis for transformational policy change. Decision-makers responsible for India's agricultural and environmental sector will have the tools required to activate a new way of doing business. This new way of doing business will result in substantially addressing the sustainability of the agricultural sector and the ecological integrity of India's most important ecosystems. The final results will positively impact high conservation value landscapes and be amplified to inform the India's broader agricultural policy framework. This will ensure sustainable, transformative change across India's agricultural landscape.
GEF	
GCP /TUR/055/GFF: Sustainable Land Management and Climate Friendly Agriculture (FSP)	To improve sustainability of agricultural and forestry land use management in pilot areas of Turkey. The project will promote the demonstration and adoption of low-carbon technologies with win-win benefits in terms of land degradation, mitigating climate change, and protecting biodiversity. The project will also contribute to increase sustainable farm profitability and forest productivity.
GCP /CMR/033/GFF: Sustainable forest management under the authority of Cameroonian Councils	Fight against the degradation and destruction of forests, major causes of biodiversity loss and climate change, by promoting the protection and sustainable management of forests by councils well organized and trained, thereby supporting the decentralisation process in Cameroon.
GCP /KEN/073/GFF: Capacity, Policy and Financial Incentives for PFM in Kisiria Forest and Integrated Rangelands Mgmt	To deliver multiple Biodiversity, Climate Change and livelihood benefits from 91,452 ha of Kirisia Forest under PFM and 50,000 ha of rangelands under Holistic Natural Resources Management respectively.

GCP /SOI/001/GFF: Integrated forest management in the Solomon Islands (FSP)	To assist the Government of the Solomon Islands to implement integrated management of protected and productive forest landscapes for sustainable community development and multiple environmental benefits.
GCP /CPR/056/GFF: Sustainable forest management to enhance the resilience of forests to climate change (FSP)	Sustainable forest management in China's forest ecosystems secures the flow of multiple ecosystem services and benefits, including carbon storage and biodiversity conservation while enhancing resilience to climate change.
GCP /NIC/049/GFF: Strengthening the Resilience of Multiple-use Protected Areas to Deliver Multiple Global Environmental Benefits	Strengthen the effectiveness of the management of 12 protected areas and promote the sustainable use of wet and dry forests, guaranteeing the conservation of biodiversity, sustainable land management, adaptation of climate change due to changes in the land use.
GCP /VAN/001/GFF: Integrated Sustainable Land and Coastal Management (FSP)	To assist the Government of Vanuatu to design and implement integrated management of productive land and sea scapes for sustainable community development and achieve multiple environmental benefits.
GCP /VEN/011/GFF: Sustainable Forest Lands Management and Conservation under an Eco-social Approach (FSP)	To integrate biodiversity conservation, sustainable land management, climate change mitigation in the forestry, planning for the Sustainable Forest Management through information, innovation, incentive schemes, participative governance, empowerment of the local communities dependant on forests and multiple mechanisms for restoring areas under degradation processes in key forest ecosystem in Venezuela.
GCP /MOZ/117/GFF: Payment for ecosystem services to support forest conservation and sustainable livelihoods (FSP)	To reduce land degradation and promote biodiversity conservation and climate change mitigation in Miombo ecosystems, through the development of a payment of ecosystem services (PES) scheme that supports sustainable use and conservation of forests and wildlife and improves local peoples' livelihoods (FSP).
GCP /KIR/009/GFF: Resilient Islands Resilient Communities (FSP)	To develop sustainable land, forest and marine ecosystem-based adaptation management to enhance the resilience of the people and their environment in Kiribati.
GCP /SRB/002/GFF: Contribution of sustainable forest management to a low emission and resilient development in Serbia (FSP)	To enable sound data, policy frameworks, practices and capacities for sustainable forest management as a part of low emission and resilient development pathway of the Republic of Serbia.
GCP /BDI/040/GFF: Food-IAP: Support for Sustainable Food Production and Enhancement of Food Security and Climate Resilience in Burundi`s Highland	To increase adoption of resilient, improved production systems for sustainable food security and nutrition through integrated landscape management and sustainable food value chains.
GCP /IND/183/GFF: Green-Agriculture: Transforming Indian agriculture for global	The Full Size Project - Green-Agriculture: Transforming Indian agriculture for global environmental benefits and the conservation of critical biodiversity and forest landscapes, aims to catalyze transformative change for

environmental benefits and the conservation of critical biodiversity and forest landscapes (FSP)	India's agricultural sector to support achievement of national and global environmental benefits and conserve critical biodiversity and forest landscapes. The project's overall objective will be realized through the implementation of two components. The first component will set in place the tools required to strengthen the country's enabling environment to enhance the capacity of the agricultural sector to deliver BD, SLM, SFM, and CCM benefits. The first component will help coordinate national, state and local approaches, including facilitating the adoption of appropriate fiscal and market incentives to promote or conserve diversity on-farm and across productive landscapes. The project will assist GoI in prioritizing efforts through the identification of high conservation-value areas where practices associated with unsustainable agricultural practices threaten ecological integrity. Strategically directing attention towards priority landscapes will help increase efficiency, innovation, and impact. The second component will demonstrate on-the-ground conservation improvements designed to drive higher-level changes. Under the second component, the project will work in high conservation priority landscapes to demonstrate replicable 'best practices'. Interventions will be designed to show how ecosystem-based agricultural improvements can deliver social, production, and ecological benefits. The project will provide an evidential basis for transformational policy change. Decision-makers responsible for India's agricultural and environmental sector will have the tools required to activate a new way of doing business. This new way of doing business will result in substantially addressing the sustainability of the agricultural sector and the ecological integrity of India's most important ecosystems. The final results will positively impact high conservation value landscapes and be amplified to inform the India's broader agricultural policy framework. This will ensure sustainable, transformative change across India's agricultural landscape.
GCP /AFG/084/GFF: Community-based sustainable land and forest management in Afghanistan	Community-based sustainable land and forest management in Afghanistan.
GCP /MAU/001/GFF: Integrated ecosystem management program for the sustainable human development in Mauritania (FSP)	Integrated ecosystem management program for the sustainable human development in Mauritania (FSP).
GCP /DRC/054/GFF: The Restoration Initiative, DRC child project: Improved Management and Restoration of Agro-sylvo-pastoral Resources in the Pilot Province of South-Kivu	To contribute to the restoration of the natural ecosystem through the reforestation and sustainable management of natural resources by local communities in South-Kivu using a Forest and Landscape Restoration (FLR) approach. The interventions will focus on reducing the degradation of forest, agricultural and pastoral land to prevent further erosion and loss of soil fertility, restore ecosystem functioning and sustainably increase productivity. Restoration and conservation interventions will be undertaken over a minimum of 4,800 ha and direct benefits will be raised for at least 5,000 vulnerable households. South-Kivu

	will be used as a pilot province to demonstrate the benefits of the FLR approach thereby promoting its implementation in other provinces in the country.
GCP /PAK/091/GFF: Reversing deforestation and degradation in high conservation value Chilgoza Pine Forests in Pakistan (FSP)	The Restoration Initiative with the objective of improved local livelihoods through increased productivity and enhanced services and functions of the chilgoza forests of Pakistan.
GCP /MOR/046/GFF: Revitalising Oasis Agro-ecosystems through a Sustainable, Integrated and Landscape Approach in the D (FSP)	Revitalise oasis agro-ecosystems in the Drâa-Tafilalet region to be productive, attractive and healthy, and to sustain and make more resilient the livelihoods of the local communities.
GCP /KEN/090/GFF: Restoration of arid and semi-arid lands (ASAL) of Kenya through bio-enterprise development and other incentives under The Restoration Initiative	Support to Sustainable Bioenterprise Development in Healthy Rangelands in the Arid&Semi-Arid Land-PPG.
GCP /TIM/012/LDF: IkanAdapt: Strengthening the adaptive capacity and resilience of fisheries and aquaculture-dependent livelihoods in Timor-Leste (LDCF part) - FSP (FSP)	To develop national capacity for resilient fisheries and aquaculture livelihoods in Timor-Leste.
GCP /TIM/010/GFF: IkanAdapt: Strengthening the adaptive capacity and resilience of fisheries and aquaculture-dependent livelihoods in Timor-Leste (GEF part) - FSP (FSP)	Strengthening the adaptive capacity, resilience and biodiversity conservation ability of fisheries and aquaculture-dependent livelihoods in Timor-Leste.
GCP /INS/806/GFF: Strengthening sustainability in commodity and food systems, land restoration and land use governance through integrated landscape management for multiple benefits in Indonesia. (FSP)	FOLUR Program Objective: To promote sustainable, integrated landscapes and efficient food value and supply chains at scale. Indonesia FOLUR Child Project Objective: To transform the management of oil palm-, cocoa-, coffee-, and rice-based food systems and landscapes in Indonesia for the generation of multiple environmental benefits.
GCP/CPR/065/GFF: Innovative transformation of China`s food production systems and agro-ecological landscapes towards sustainability (FSP)	To support the innovative transformation of China`s agro-landscapes and agri-food value chains towards environmental and ecological sustainability at scale in support of the 2030 Sustainable Development Goals (SDGs), Rural Revitalization, and climate resilience.

GCP/ZIM/031/GFF: A cross-sector approach supporting the mainstreaming of sustainable forest and land management, to enhance ecosystem resilience for improved livelihoods in the Save and Runde Catchments of Zimbabwe (FSP)	Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner.
GCP /NIR/001/GFF: Promoting Integrated Landscape Management & Sustainable Food Systems in the Niger Delta Region in Nigeria (FSP)	
GCP /UZB/010/GFF: Food System, Land Use and Restoration Impact Program in Uzbekistan (FSP)	To scaling up best practices and innovations for sustainable and inclusive wheat-based production landscapes and value chains.
GCP /MYA/025/GFF My-Coast: Ecosystem Based Conservation of Myanmar's Southern Coastal Zone (FSP)	My-Coast: Ecosystem Based Conservation of Myanmar's Southern Coastal Zone.
GCP /VIE/002/GFF: Sustainable Rice Landscape in the Mekong Delta (FSP)	To incentivize scaling up of proven best practices and innovations for sustainable and inclusive rice-based production landscapes to generate a range of global environmental and livelihood benefits.
GCP/PER/052/GFF: Building Human Well-being and Resilience in Amazonian Forests by Enhancing the Value of Biodiversity for Food Security and Bio-businesses, in a Context of Climate Change (FSP)	
GCP/GUI/024/GFF : Integrated management of degraded landscapes for sustainable food systems and livelihoods in Guinea Forest Region and Upper Guinea (FSP)	To promote sustainable and comprehensive food systems that are deforestation free and provide ecosystem services, with a focus on palm oil productive landscapes.
GCP /YEM/044/GFF: Adaptation to Climate Change in Yemen: Addressing Biodiversity through Integrated Land & Wat.. (GEF) (FSP)	

GCP /YEM/042/LDF: Adaptation to Climate Change in Yemen: Addressing Biodiversity through Integrated Land & Wat. (LDCF) (FSP)	
GCP /NIC/051/GFF: Transforming Food Systems and Reducing Deforestation in the Protected Areas and Biological Corridors landscapes from the Southern Caribbean Coast and San Juan River autonomous region (FSP)	To promote sustainable, integrated landscapes and efficient food systems (cocoa, beef/ dairy cattle) for key value chains in the landscapes surrounding the protected areas and biological corridors of the South Caribbean Coast Autonomous Region (RACCS, in Spanish) and the San Juan River.
GCP/MLI/058/GFF : Resilient, productive and sustainable landscapes in Mali`s Kayes Region (FSP)	To promote the sustainable management of natural resources while strengthening integrated and resilient food systems in Kayess degraded northern and southern landscapes.
GCP/MLI/060/LDF: Resilient, productive and sustainable landscapes in Mali`s Kayes Region (FSP)	To promote the sustainable management of natural resources while strengthening integrated food systems in Kayes's degraded northern and southern landscapes.
GCP /IND/184/GFF: Promotion of Sustainable Food Systems in India through Transforming Rice-Wheat Systems in Punjab, Haryana, Odisha and Chhattisgarh (FSP)	To mainstream integrated models of sustainable and healthy food systems in rice/wheat-dominated landscapes in India.
GCP /MAG/098/GFF: Integrated Landscape Management for zero-deforestation coffee and rice value chains (FSP)	
GCP /BEN/064/GFF: Strengthening Human and Natural Systems Resilience to Climate Change through Mangrove Ecosystems Conservation and Sustainable use in Southern Benin (GEF portion) (FSP)	
GCP /BEN/066/LDF: Strengthening human and natural systems resilience to climate change through mangrove ecosystems con (FSP)	

GCP/ERI/904/GFF: Building Community Based Integrated and Climate Resilient Natural Resources Management and Enhancing Sustainable Livelihood in the South-Eastern Escarpments and Adjacent Coastal Areas of Eritrea (FSP)	Enhance resilience of vulnerable agro-pastoralist and fishing communities along degraded landscapes/seascapes in the south-eastern escarpments and adjacent coastal areas of Eritrea through an integrated ecosystem-based and market-driven approach.
GCP/ERI/902/LDF: Building Community Based Integrated and Climate Resilient Natural Resources Management and Enhancing Sustainable Livelihood in the South-Eastern Escarpments and Adjacent Coastal Areas of Eritrea (FSP)	Enhance resilience of vulnerable agro-pastoralist and fishing communities along degraded landscapes/seascapes in the south-eastern escarpments and adjacent coastal areas of Eritrea through an integrated ecosystem-based and market-driven approach.
GCP /NIC/049/GFF: Strengthening the Resilience of Multiple-use Protected Areas to Deliver Multiple Global Environmental Benefits	Strengthen the effectiveness of the management of 12 protected areas and promote the sustainable use of wet and dry forests, guaranteeing the conservation of biodiversity, sustainable land management, adaptation of climate change due to changes in the land use.
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